

## **CAUCASIANS & DIABETES IN NEVADA**

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### **Nevada Diabetes Prevention and Control Project**

#### **Introduction**

The Diabetes Control Project (DPCP) is part of the Bureau of Community Health of the Nevada State Health Division, and has been receiving funding from the Centers for Disease Control & Prevention (CDC) since October 1996. The mission of the DPCP is to define the nature, extent, distribution and causes of diabetes in Nevada; develop new approaches to reduce the burden of diabetes; ensure that diabetes policy and legislation is enforced; coordinate diabetes-related efforts of the public health system with those of private health care providers and with appropriate governmental, voluntary, professional, and academic institutions; and provide professional and public education regarding diabetes. Part of the mission of the DPCP is to conduct surveillance on diabetes prevalence in Nevada.

The purpose of this report is to identify diabetes prevalence among Caucasians in Nevada, and to determine the rates that Caucasians with diabetes are receiving recommended tests, examinations and immunizations.

#### **Data Sources**

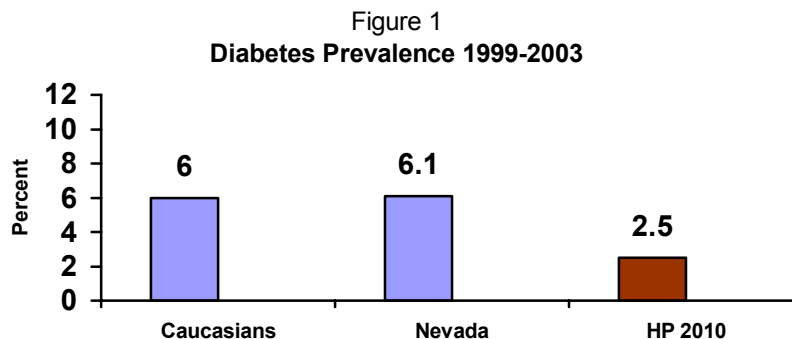
Data from the Behavioral Risk Factor Surveillance System (BRFSS) assists in identifying prevalence of diabetes in Nevada. The BRFSS is a randomized, telephone survey of non-institutionalized adults that asks questions on health-related topics. One question included in the core section of the survey is “Have you ever been told by a doctor that you have diabetes”? The data from this question is analyzed by gender, racial/ethnic group, age group, education level, and household income. Survey participants answering yes to the core question are then asked a series of questions from the diabetes module. Aggregated data from the core question; selected diabetes module questions and immunization questions will be presented to describe the prevalence of diabetes among Caucasians in Nevada. Aggregated data is presented in this report to reduce the chance that small numbers may skew the results.

Healthy People 2010 objectives have been identified for certain diabetes indicators, and are included in this report for comparative purposes.

#### **Diabetes Prevalence**

Diabetes is one of the most serious health challenges facing both Nevada and the United States. According to *Healthy People 2010: Objectives for Improving Health*, p.5-8, gaps exist among racial and ethnic groups in the rate of diabetes and its associated complications in the United States. Certain racial and ethnic communities, as well as economically disadvantaged or older people, suffer disproportionately compared to Caucasians.

As stated above, the BRFSS survey asks participants if a doctor has told them that they have diabetes. Aggregated data for the years 1999 through 2003 is presented. The Healthy People 2010 objective is also included.

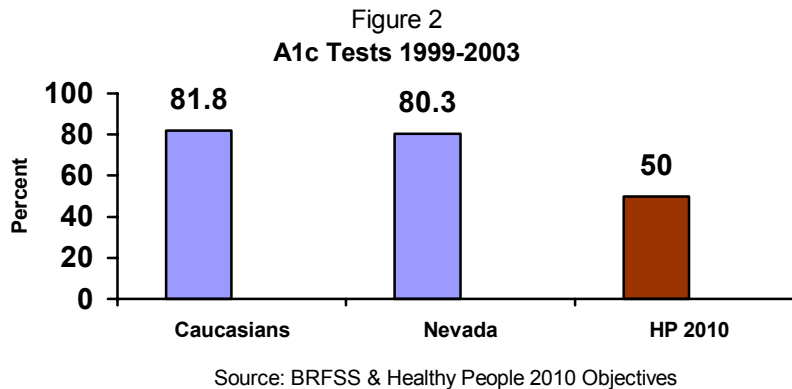


Source: BRFSS & Healthy People 2010 Objectives

As shown in Figure 1, a similar percentage of Caucasian adults in Nevada have been told by a doctor they have diabetes than the total adult population, and the rate for both Caucasians and the total population are far above the Health People 2010 objective of 2.5%. The DPCP will continue to monitor the trends of diabetes prevalence as part of the surveillance effort.

### **A1c Tests**

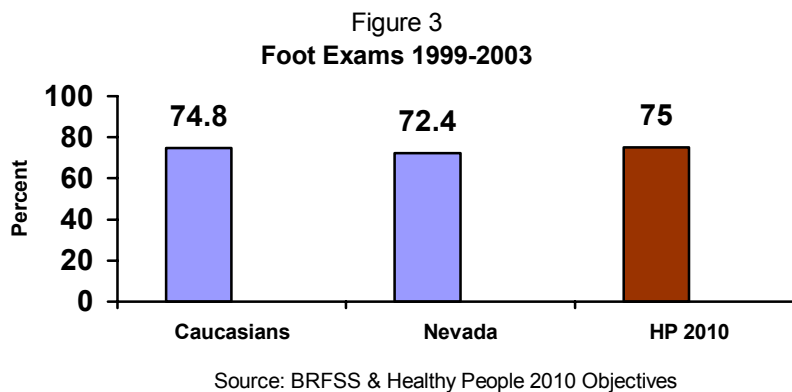
The American Diabetes Association (ADA) clinical practice recommendations indicate that a glycated hemoglobin (A1c) test be done at least two times per year, or quarterly if diabetes treatment changes, or the patient is not meeting treatment goals. The BRFSS diabetes module includes a question on the number of times in the past year a health care professional has checked for A1c. The denominator for the question is persons who have heard of the A1c test and have seen a health care professional in the past year. Aggregated data for 1999-2003 is shown for the total survey. The data is shown in Figure 2. The Healthy People 2010 objective is also shown.



As shown in Figure 2, the percentage of Caucasians in Nevada with diabetes receiving at least one A1c test is higher than the percentage for all persons with diabetes. The percentage of Caucasians and the total population are far above the Healthy People 2010 objective. The DPCP will continue to monitor the percentage of persons with diabetes receiving the A1c test as part of the surveillance effort.

### **Foot Exams**

Regular foot exams by a health care professional play an important part in reducing the risk for non-traumatic lower extremity amputations. The ADA practice recommendations state that comprehensive foot exams should be done at least once a year, and more often in patients with high-risk foot conditions. The BRFSS diabetes module asks persons with diabetes the number of times a health care professional has examined their feet in the past year. The denominator is people with diabetes who have feet. Aggregated data for 1999-2003 is shown for the total survey and Caucasians. The Healthy People 2010 objective is also shown.

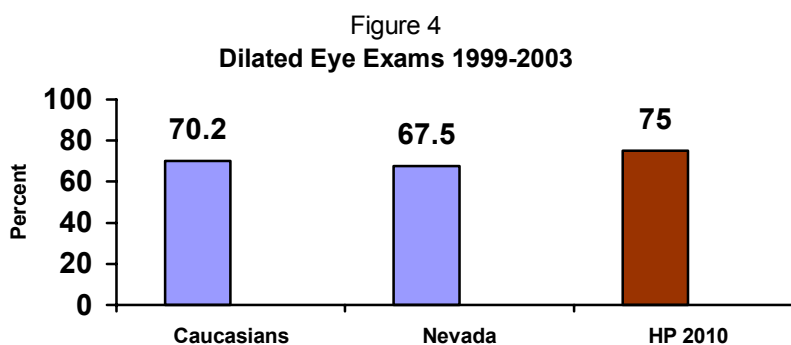


As shown in Figure 3, the percentage of Caucasians in Nevada with diabetes having at least one foot exam is higher than the percentage for all persons with diabetes. The percentage of

Caucasians having at least one foot exam is identical to the Healthy People 2010 objective, while the total population is also below the objective. The DPCP will continue to monitor the percentage of persons with diabetes having the recommended foot exam as part of the surveillance effort.

### **Eye Exams**

The ADA practice recommendations state that all persons with diabetes should receive a dilated eye exam once a year. The BRFSS diabetes module asks persons with diabetes when they last had a dilated eye exam. The data in the following chart shows the percentage of persons with diabetes who had a dilated eye exam in the past twelve months. The denominator is people with diabetes. Aggregated data for 1999-2003 is shown for the total survey and Caucasians. The Healthy People 2010 objective is also shown.



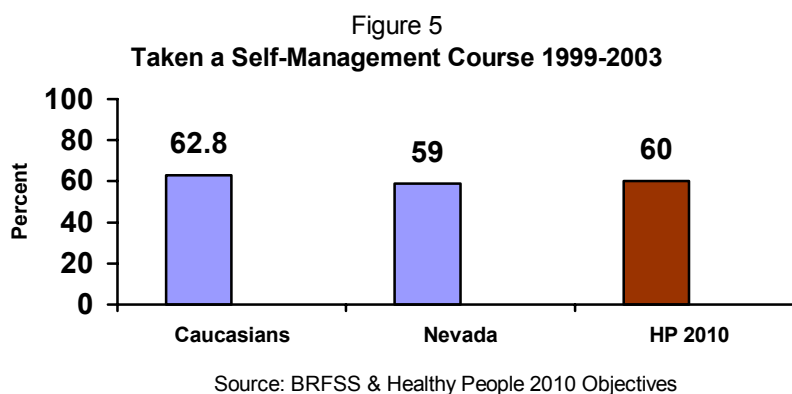
Source: BRFSS & Healthy People 2010 Objectives

As shown in Figure 4, the percentage of Caucasians in Nevada with diabetes that had a dilated eye exam in the previous twelve months is higher than the percentage for all persons with diabetes. The percentage of Caucasians having a dilated eye exam is also below the Healthy People 2010 objective. The total adult population with diabetes does not meet the objective. The DPCP will monitor the percentage of persons with diabetes having a dilated eye exam as part of the surveillance effort.

### **Self-Management Course**

Patient self-management of diabetes is an important aspect of the treatment of the disease. Many health care providers work with their diabetes patients to set self-management goals, and refer their diabetes patients to self-management courses.

In the 2000 survey, the BRFSS diabetes module began asking participants “Have you ever taken a course to manage your diabetes yourself?” The data in Figure 5 shows the percentage of persons with diabetes who have taken a self-management course. The denominator is people with diabetes. Aggregated data for 2000-2003 is shown for the total survey and Caucasians. The Healthy People 2010 objective for formal diabetes education is also shown.



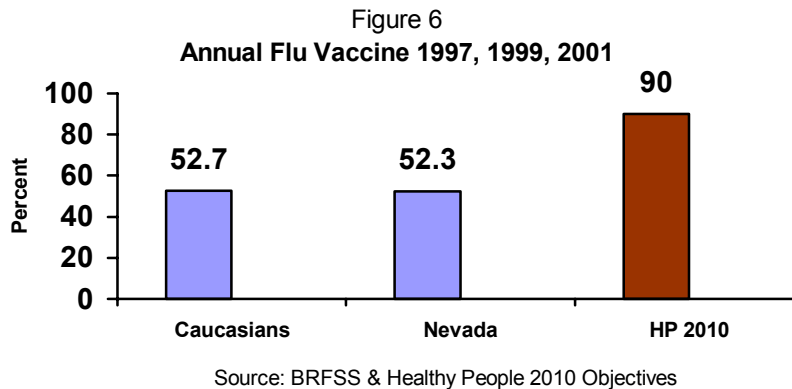
As shown in the chart, the percentage of Caucasians in Nevada with diabetes that have taken a self-management course is higher than the percentage for all persons with diabetes, and is also above the Healthy People 2010 objective. The DPCP will monitor the percentage of persons with diabetes taking a self-management course as part of the surveillance effort.

### **Immunizations**

The DPCP has data from the BRFSS immunization module for the years 1997, 1999 and 2001. This module was included in the survey in odd-numbered years until 2001, and is now included every year. The data presented is cross-tabulated with the answers to those who have been told by a doctor that they have diabetes. Two questions are asked in this module:

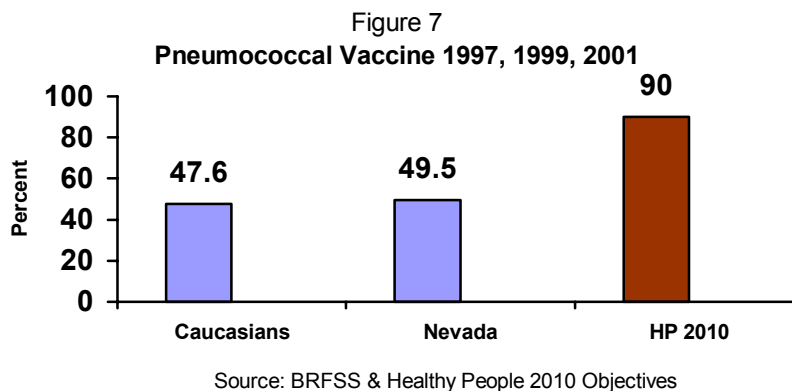
1. During the past 12 months have you had a flu shot?
2. Have you ever had a pneumonia vaccine?

Figure 6 shows aggregated data for flu shots for 1997, 1999 and 2001 both for those who have diabetes.



As shown in Figure 6, the percentage of Caucasians in Nevada with diabetes that had a flu shot in the past twelve months is identical the percentage for all persons with diabetes. The Healthy People 2010 objective is for at-risk adults who should receive an annual influenza vaccination. Caucasians who have diabetes and all Nevada adults who have diabetes do not meet this objective. DPCP will monitor the percentage of persons with diabetes having a flu shot as part of the surveillance effort.

Figure 7 shows aggregated data for pneumonia vaccines for 1997, 1999 and 2001 both for those who have diabetes.



As shown in Figure 7, the percentage of Caucasians in Nevada with diabetes that have ever had a pneumonia vaccine is lower than the percentage for all persons with diabetes. The Healthy People 2010 objective is for at-risk adults who should receive a pneumococcal vaccination. Caucasians who have diabetes and all Nevada adults who have diabetes do not meet this objective. The DPCP will monitor the percentage of persons with diabetes ever having a pneumonia vaccine as part of the surveillance effort.

## **Conclusion**

Although the prevalence of diabetes is identical to the Caucasian population than the total population in Nevada, it appears that Caucasians in Nevada with diabetes are receiving recommended tests, exams and immunizations at rates that are close to, or exceed, the rates for all persons who have diabetes. With the exception of diabetes prevalence and recommended immunizations, it appears that Healthy People 2010 objectives for diabetes indicators are being met, or are close to being met, in Nevada. The DPCP will continue to monitor these trends as part of the surveillance effort, and support programs and initiatives that increase the awareness of diabetes in the Caucasian population.